

**APPENDIX A**

**PG&E Point Buchon Ocean Bottom Seismometer (OBS)  
Project, System Removal Biological Survey Report  
(September 8, 2015)**



ENGINEERS, GEOLOGISTS & ENVIRONMENTAL SCIENTISTS

September 8, 2015  
Project No. 1102-0621

PG&E Geosciences Department  
245 Market Street  
San Francisco, California 94105

Attention: Ms. Marcia McLaren  
Senior Seismologist

Subject: PG&E Point Buchon Ocean Bottom Seismometer (OBS) Project, System Removal  
Biological Survey Report

Dear Ms. McLaren:

In accordance with the requirements of the California Coastal Commission (CCC) Coastal Development Permit (CDP) E-11-017 and conditions associated with the California State Lands Commission (CSLC)-issued lease PRC 8985.1, Padre Associates, Inc. (Padre) is pleased to submit this report for the subject Project for your subsequent submittal to the CCC and CSLC. This report summarizes the results of the post-removal biological survey of the ocean bottom seismometer (OBS) system.

## INTRODUCTION

As part of Pacific Gas and Electric Company's (PG&E) seismic safety assessment at the Diablo Canyon Power Plant (DCPP), an OBS system was installed in the nearshore waters off Pt. Buchon, San Luis Obispo County (Attachment A - Figure 1). The system was comprised of two temporary OBS units and four long-term OBS units, and approximately 11.5 miles (mi) (18.5 kilometer [km]) of 2-inch (in) (5-centimeter [cm]) diameter cable that provided power to the long-term OBS units and transmitted data to and from the shore-based facility within DCPP. The original temporary OBS units were installed for 17 weeks and removed in November 2013. Initial installation of those units, the long-term units, and cable was completed from July 20 through July 27, 2013. Final adjustments to the system were made between November 6 and November 24, 2013, and PG&E accepted the fully-adjusted system on November 24, 2013.

On February 19, 2014, the long-term OBS system experienced initial failures with the entire system becoming inoperable on April 1, 2014, necessitating the recovery of the long-term OBS system from the seafloor to better determine the causes for the system failure and to evaluate potential repair or replacement operations. To maintain earthquake monitoring four temporary OBS units were added on November 4, 2014. Recovery operations of the long-term OBS system and maintenance and redeployment of the four temporary OBS units were initiated on May 14, 2015 and were completed on May 22, 2015.

Following completion of the recovery operation, a seafloor biological survey was conducted on May 18, 2015 and May 27 through 29, 2015 to collect data on possible impacts associated with the presence and removal of the system and to confirm that no project-associated debris remained on the seafloor. The survey area extended from the DCPP seawater intake embayment seaward along the cable route which was entirely within the State of California 3-mile jurisdictional line between Point Buchon (to the north) to the DCPP intake

embayment north of Point San Luis. Portions of the survey area were located within the Point Buchon Marine Protected Area.

Tenera Environmental (Tenera) was retained by PG&E to complete a diver survey of the nearshore segment from the shallow subtidal water depths within the DCPD embayment to the 76 foot (ft) (23 meter [m]) isobath. Padre was retained to complete the deeper water segments of the cable corridor. The following discusses the results of the two surveys and provides the aforementioned assessment of project-associated impacts.

## **METHODS AND EQUIPMENT**

The survey of the nearshore segment (between the offshore end of the cable conduit within the DCPD intake embayment and the 76 ft [23 m]) isobath was completed on May 18, 2015 by Tenera divers using SCUBA. Divers used a Garmin ETrex Legend GPS unit to collect latitude/longitude coordinates along the cable alignment. The unit was attached to a surface float with a tether line which was held taught to assure accurate location data. A Sony Handycam Model HDR-CX550V digital video camera inside a Light and Motion Bluefin 550 waterproof housing was used to document habitats and biota along the cable route.

The deeper water segment (greater than 76 ft) was completed by a remotely operated vehicle (ROV) survey over a three-day period (May 27 through 29, 2015) and utilized a Phantom 2+2 ROV, owned and operated by Aqueos Corporation under subcontract to Padre. The ROV was equipped with a scanning sonar and video cameras. The M/V *Surveyor*, a 100 ft [31m]-long, steel-hulled vessel owned and operated by Maritime Logistics, was the ROV support vessel. ROV and vessel positioning was provided by Fugro Pelagos, Inc. The ROV survey was initiated at the approximate termination point of the Tenera dive survey and progressed to the west and north (Attachment A, Figure 1).

Padre Marine biologist Ms. Jennifer Klaib monitored ROV images in real time while onboard the survey vessel. Additionally, video images collected during the two surveys were reviewed by Mr. Ray de Wit, Padre Senior Marine Scientist. The discussion and impact assessment provided below are based upon those reviews.

## **OBSERVATIONS**

### **Nearshore**

The nearshore surveyed was approximately 1,837 ft- (560 m-) long, from the 76 ft (23 m) isobath to where the cable entered the PVC conduit along the shoreline of the DCPD intake embayment (Attachment A - Figure 2). The results of that survey indicated that seafloor habitats within the survey area consisted of sand flat, most common immediately seaward of the intake embayment; a mixture of bedrock, boulder, cobble, gravel, sand, common with the intake embayment; and bedrock reefs and boulders where the cable approaches the intertidal revetment and comes onshore.

A tube-building worm (*Diopatra* sp.) is common within the sedimentary seafloor habitat within this segment; also present is the bat star (*Patiria miniata*). Mixed substrate (bedrock, boulder, cobble, gravel, sand) habitat supported several algal species, including the sea palm (*Pterogophora californica*), a brown strap kelp (*Laminaria setchellii*), and occasional giant kelp

(*Macrocystis pyrifera*). Epifauna associated with rocky substrate included at least two species of sea stars (*Pisaster giganteus* and *P. ochraceus*), and ornate tube worms (*Diopatra ornata*).

There were no indications of habitats or biota having been impacted from the cable removal within the nearshore area. The cable remained relatively close to the as-built route and there were no observations of overturned rocks, damaged kelp (other than kelp attached to the cable itself), or injured or dislodged invertebrates. No remnant "trail" of the cable (depressions within the sediment) was observed, however divers did note a "furrow" through the *Diopatra* beds in one area where the sand flat transitioned into the mixed substrate; video of this furrow was recorded. No cable-associated impacts within the mixed substrate of bedrock and boulders were observed and no project-associated debris was observed in this segment.

### Offshore

The ROV survey was initiated at the 100 ft (30 m) isobath. Approximately 11 hours of video was recorded within this segment (depth range 100 to 345 ft [30 and 105 m]) (Attachment A - Figure 3). Based on navigational post-plots, approximately 925 ft (282 m) of the cable was not observed by diver or ROV surveys. The 925 ft (282 m) segment was between the inshore most point of the ROV survey and the offshore terminus of the Tenera diver survey. The segment was within sedimentary habitat, and no debris, rock or other high-relief objects were observed on the scanning sonar image screen.

**100 FT ISOBATH TO LONG-TERM OBS-4 LOCATION.** Seafloor habitats within this segment comprised both sedimentary (silty clay to sand) and solid (boulder fields and isolated low to moderate relief [1 to 8 ft- [0.3 to 2.4 m-] high) reefs. One to 6 in-(2.5 to 15 cm-) high north-south oriented sand waves were present within the more coarse sediments.

The lower-relief rock habitat within this segment was covered with a thin veneer of sediment and was relatively depauperate of epibiota, although higher-relief features did support the plumose anemone (*Metridium giganteus*). Other rock-associated epibiota included solitary corals, gorgonian coral (i.e., *Muricea* sp.), and unidentified hydroids. Juvenile and adult rockfish were present, but not common, around those rock features. Common biota observed within the sedimentary habitats included the bat star (*Patiria miniata*) and two species of sea pen (*Stylatula elongata* and *Acanthoptilum* sp.). An unidentified burrowing anemone and a tube worm (*Diopatra ornata*) were also present within the sedimentary habitat.

No scraping or abrasion on the rock substrates, or depressions or trenching within the sedimentary substrates were observed within this segment. No project-associated debris was observed in this segment.

**LONG-TERM OBS-4 LOCATION TO LONG-TERM OBS-3 LOCATION.** Seafloor habitats within this segment were both sedimentary (silty clay) and solid, the latter comprising low to moderate relief (1 to 8 ft- [0.3 to 2.4 m-] high) reefs with boulders. No coarse sedimentary habitat or sand waves were observed within this segment.

Rock habitat supported an epibiota similar to that described above; however, rock substrate in water depths of 250 ft (76 m) or more supported the crinoid (*Florometra* sp.) Rockfish, including blue rockfish (*Sebastes mystinus*), which were present around the rock reefs within this segment, but were not common. Characteristic sediment-associated macroepibiota

included the two aforementioned sea pen species and the plumose sea pen (*Ptilosarcus gurneyi*). The multi-armed sunstar (*Solaster* sp.) and the grey tectrbranch (*Pleurobranchus* sp.) were present but not abundant.

No scraping or abrasion on the rock substrates, nor depressions, or trenching within the sedimentary substrates were observed within this segment. No project-associated debris was observed in this segment.

**LONG-TERM OBS-3 LOCATION TO LONG-TERM OBS-2 LOCATION.** Fine sediments characterize the seafloor habitat at the long-term OBS-2 location and along the 3.0 mi - (4.5 km) long cable route between the two units; no rock habitat was observed within this area. Infauna and macroepibiota observed within this cable segment was similar to that discussed above, with sea pens (particularly *Acanthoptilum* sp. and *Stylatula elongata*) and unidentified octopi being most common. Fish observed on and around the sedimentary seafloor included both long and short-spine combfish (*Zaniolepis latipinnis* and *Z. frenata*, respectively), and unidentified flatfish.

No depressions, or trenching within the sedimentary substrates were observed in this segment, and no project-associated debris was observed in this segment.

**LONG-TERM OBS-2 LOCATION TO LONG-TERM OBS-1 LOCATION.** The seafloor at the long-term OBS-1 location and along 2.1 mi- (3.4 km-) long corridor between the two units was sedimentary, comprising fine-grain sediments; no coarse-grain sediments or rock features were observed within this segment. The epibiota associated with the sedimentary habitat was similar to that discussed above; however, Dungeness crabs (*Cancer magister*) were more common here than in deeper water areas.

A depression at the long-term OBS-1 location was the only obvious seafloor alteration observed within this segment. That depression is estimated to be approximately six inches (in) (five centimeters [cm]) deep and approximately two feet (0.6 m) in diameter and had some shell hash. No other depressions, or trenching within the sedimentary substrates were observed in this segment, and no project-associated debris was observed within this segment.

## **ASSESSMENT OF IMPACTS**

Based on the information provided in the video from the ROV survey and from that collected during Tenera's diver survey, the presence and removal of the OBS system appears to have resulted in no substantial impacts to either the seafloor habitats or biota over which the cable crossed. The four long-term OBS units, and approximately 11.5 mi (18.5 km) of cable were successfully removed and no project-associated debris was observed within the surveyed corridor.

A depression at the former long-term OBS-1 location and "furrow" through the *Diopatra* bed in the nearshore area were the only obvious seafloor alteration observed during both surveys. This depression and furrow is expected to "fill in" through natural sedimentation from the surrounding silty sediments and the area would be expected to support a fauna similar to that observed within these water depths within the project area. Other depressions in the deeper-water silty sedimentary substrate appear to be bioturbations (disturbances caused

biota). Neither scraping nor abrasion on the rock substrates or trenching within the sedimentary substrates was observed.

In summary, and based on the aforementioned data sources, no substantial OBS cable-associated negative effects to the seafloor habitats or associated biota were observed. The OBS-associated depression is not considered a significant impact and is expected to eventually fill with the natural sediments within the area and the “furrow” is expected to be a short-term feature and those sediments should be repopulated with epibiota similar to that of the surrounding area. If you should have any questions regarding the above information and/or require additional information, please contact me at (805) 786-2650, ext. 30 or Mr. Simon Poulter at (805) 683-1233, ext. 4.

Sincerely,

PADRE ASSOCIATES, INC.



Jennifer Klaib  
Marine Biologist



Simon A. Poulter  
Manager, Environmental Sciences Group

Attachments: Attachment A - Figures

c: Kris Vardas (PG&E)

**ATTACHMENT A  
FIGURES**

---

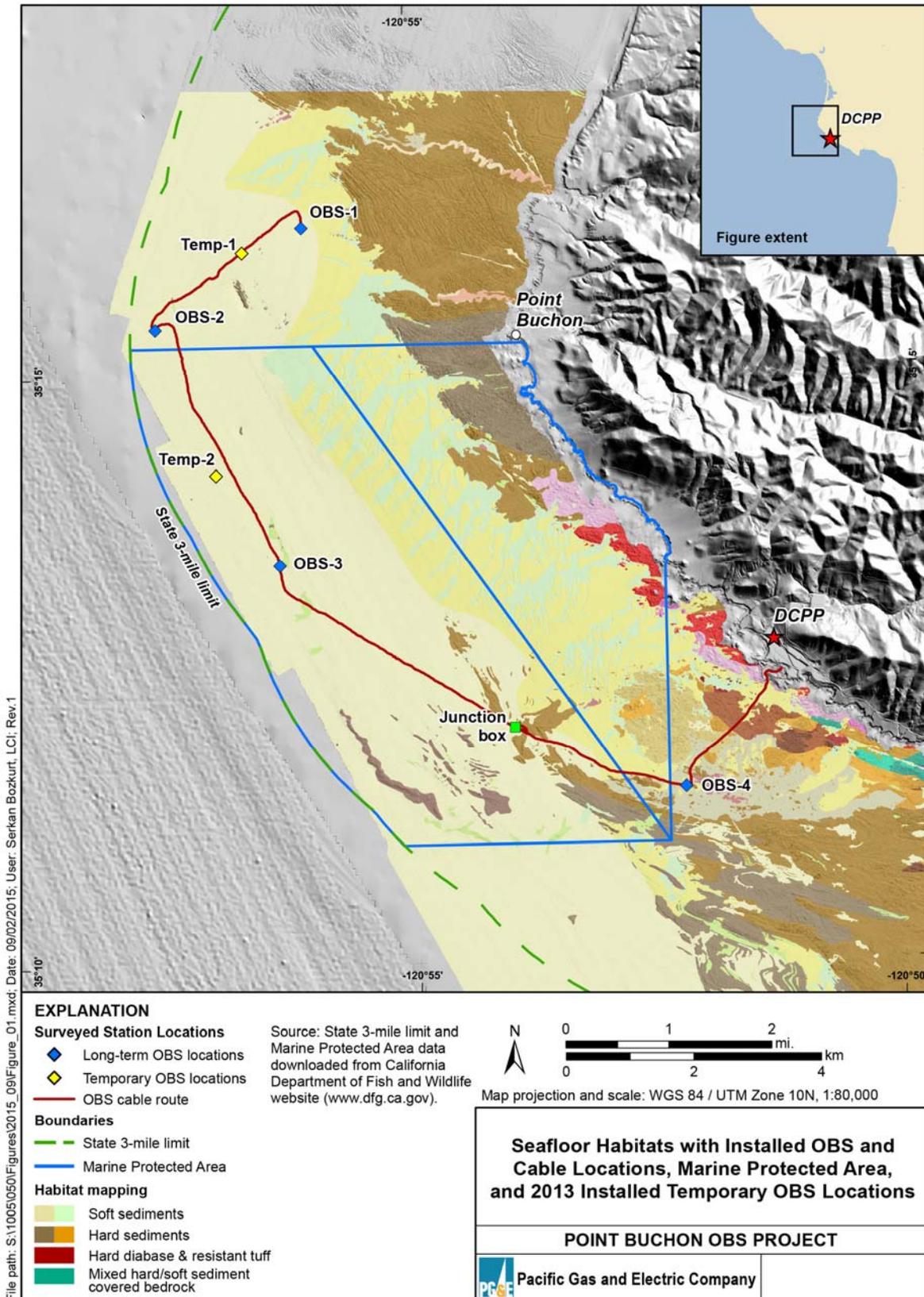


Figure 1. Region and Site Seafloor Habitats with Installed OBS and Cable Locations

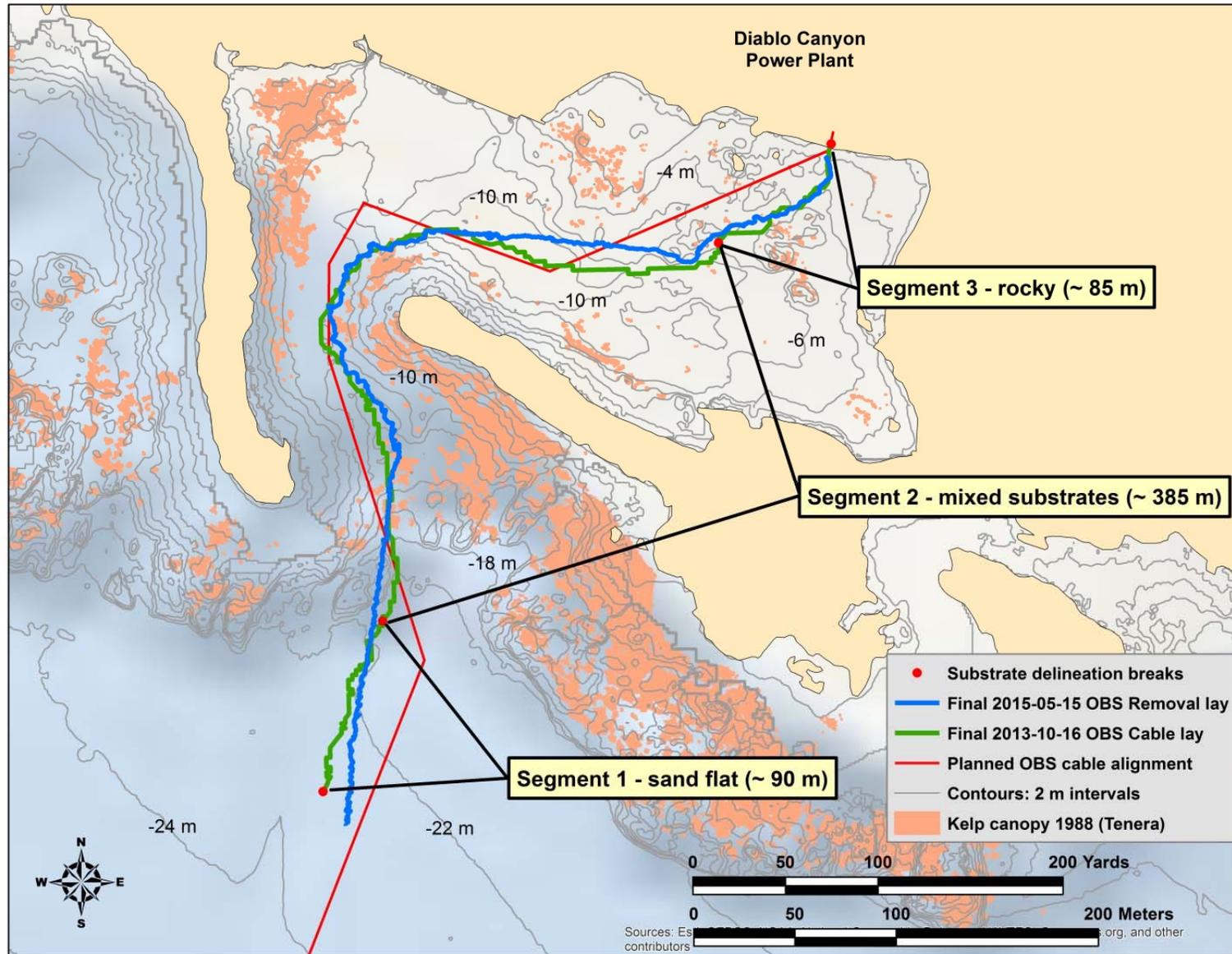
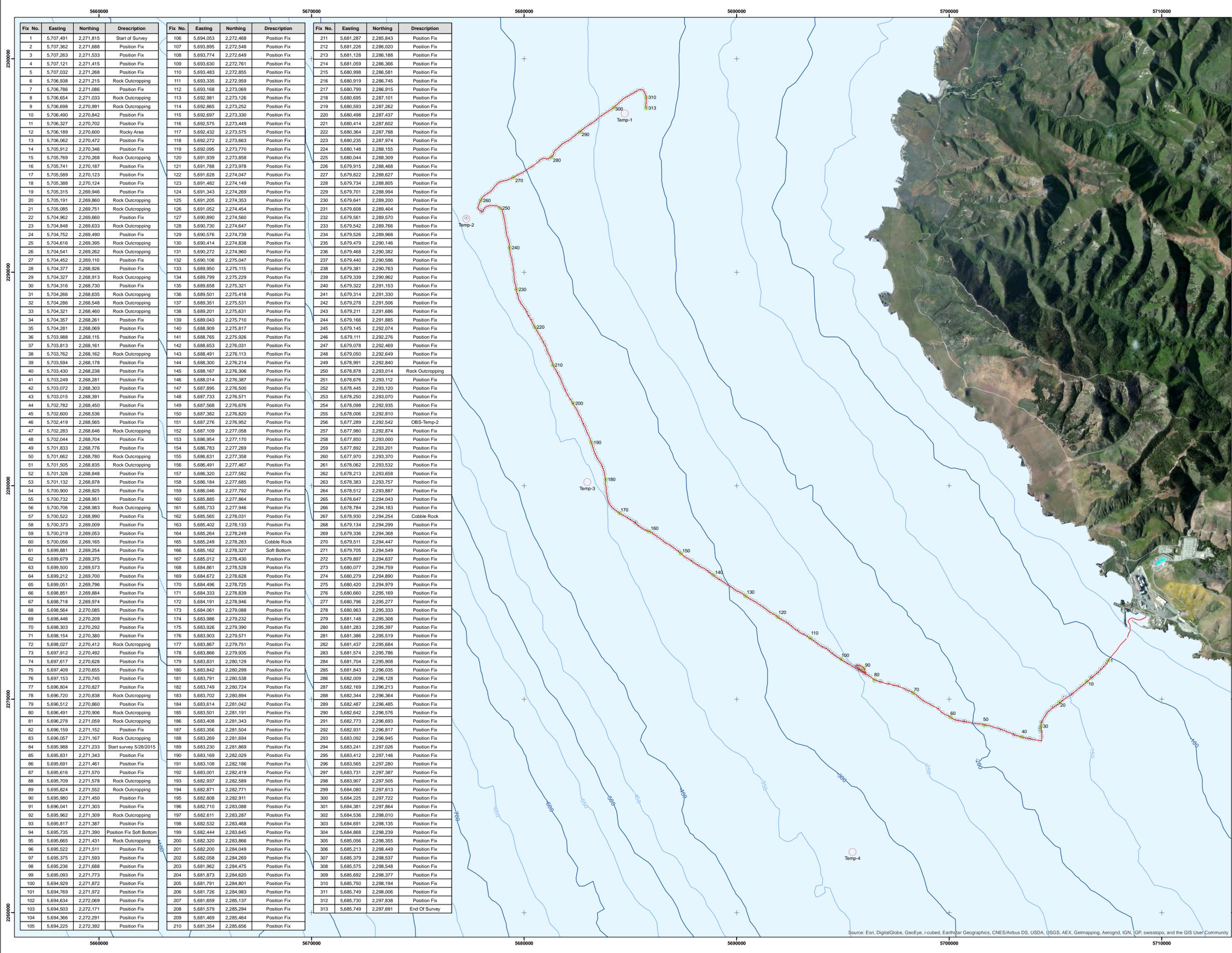


Figure 2. Diver Survey Location



Fix No.	Easting	Northing	Description
1	5,707,491	2,271,815	Start of Survey
2	5,707,362	2,271,688	Position Fix
3	5,707,263	2,271,533	Position Fix
4	5,707,121	2,271,415	Position Fix
5	5,707,032	2,271,268	Position Fix
6	5,706,938	2,271,215	Rock Outcropping
7	5,706,786	2,271,086	Position Fix
8	5,706,654	2,271,033	Rock Outcropping
9	5,706,698	2,270,991	Rock Outcropping
10	5,706,490	2,270,842	Position Fix
11	5,706,327	2,270,702	Position Fix
12	5,706,189	2,270,600	Rocky Area
13	5,706,062	2,270,472	Position Fix
14	5,705,912	2,270,346	Position Fix
15	5,705,769	2,270,268	Rock Outcropping
16	5,705,741	2,270,187	Position Fix
17	5,705,589	2,270,123	Position Fix
18	5,705,388	2,270,124	Position Fix
19	5,705,315	2,269,946	Position Fix
20	5,705,191	2,269,860	Rock Outcropping
21	5,705,085	2,269,751	Rock Outcropping
22	5,704,962	2,269,660	Position Fix
23	5,704,848	2,269,633	Rock Outcropping
24	5,704,752	2,269,490	Position Fix
25	5,704,616	2,269,395	Rock Outcropping
26	5,704,541	2,269,262	Position Fix
27	5,704,452	2,269,110	Position Fix
28	5,704,377	2,268,926	Position Fix
29	5,704,327	2,268,913	Rock Outcropping
30	5,704,316	2,268,730	Position Fix
31	5,704,266	2,268,635	Rock Outcropping
32	5,704,286	2,268,548	Rock Outcropping
33	5,704,321	2,268,460	Rock Outcropping
34	5,704,357	2,268,261	Position Fix
35	5,704,281	2,268,069	Position Fix
36	5,703,988	2,268,115	Position Fix
37	5,703,813	2,268,161	Position Fix
38	5,703,762	2,268,162	Rock Outcropping
39	5,703,594	2,268,178	Position Fix
40	5,703,430	2,268,238	Position Fix
41	5,703,249	2,268,281	Position Fix
42	5,703,072	2,268,303	Position Fix
43	5,703,015	2,268,391	Position Fix
44	5,702,782	2,268,450	Position Fix
45	5,702,600	2,268,536	Position Fix
46	5,702,419	2,268,565	Position Fix
47	5,702,283	2,268,646	Rock Outcropping
48	5,702,044	2,268,704	Position Fix
49	5,701,833	2,268,776	Position Fix
50	5,701,662	2,268,780	Rock Outcropping
51	5,701,505	2,268,835	Rock Outcropping
52	5,701,326	2,268,848	Position Fix
53	5,701,132	2,268,878	Position Fix
54	5,700,900	2,268,925	Position Fix
55	5,700,732	2,268,951	Position Fix
56	5,700,706	2,268,983	Rock Outcropping
57	5,700,522	2,268,990	Position Fix
58	5,700,373	2,269,009	Position Fix
59	5,700,219	2,269,053	Position Fix
60	5,700,056	2,269,165	Position Fix
61	5,699,881	2,269,254	Position Fix
62	5,699,679	2,269,375	Position Fix
63	5,699,500	2,269,573	Position Fix
64	5,699,212	2,269,700	Position Fix
65	5,699,051	2,269,796	Position Fix
66	5,698,851	2,269,884	Position Fix
67	5,698,718	2,269,974	Position Fix
68	5,698,564	2,270,085	Position Fix
69	5,698,446	2,270,209	Position Fix
70	5,698,303	2,270,292	Position Fix
71	5,698,154	2,270,380	Position Fix
72	5,698,027	2,270,412	Rock Outcropping
73	5,697,912	2,270,492	Position Fix
74	5,697,617	2,270,628	Position Fix
75	5,697,409	2,270,655	Position Fix
76	5,697,153	2,270,745	Position Fix
77	5,696,804	2,270,827	Position Fix
78	5,696,720	2,270,838	Rock Outcropping
79	5,696,512	2,270,860	Position Fix
80	5,696,491	2,270,906	Rock Outcropping
81	5,696,278	2,271,059	Rock Outcropping
82	5,696,159	2,271,152	Position Fix
83	5,696,057	2,271,167	Rock Outcropping
84	5,695,988	2,271,233	Start survey 5/28/2015
85	5,695,831	2,271,343	Position Fix
86	5,695,691	2,271,461	Position Fix
87	5,695,616	2,271,570	Position Fix
88	5,695,709	2,271,578	Rock Outcropping
89	5,695,824	2,271,552	Rock Outcropping
90	5,695,980	2,271,450	Position Fix
91	5,696,041	2,271,303	Position Fix
92	5,695,962	2,271,309	Rock Outcropping
93	5,695,817	2,271,387	Position Fix
94	5,695,735	2,271,390	Position Fix Soft Bottom
95	5,695,665	2,271,431	Rock Outcropping
96	5,695,522	2,271,511	Position Fix
97	5,695,375	2,271,593	Position Fix
98	5,695,236	2,271,688	Position Fix
99	5,695,093	2,271,773	Position Fix
100	5,694,929	2,271,872	Position Fix
101	5,694,769	2,271,972	Position Fix
102	5,694,634	2,272,069	Position Fix
103	5,694,503	2,272,171	Position Fix
104	5,694,366	2,272,291	Position Fix
105	5,694,225	2,272,392	Position Fix

Fix No.	Easting	Northing	Description
106	5,694,053	2,272,468	Position Fix
107	5,693,895	2,272,548	Position Fix
108	5,693,774	2,272,649	Position Fix
109	5,693,630	2,272,761	Position Fix
110	5,693,483	2,272,855	Position Fix
111	5,693,335	2,272,959	Position Fix
112	5,693,168	2,273,069	Position Fix
113	5,692,981	2,273,126	Position Fix
114	5,692,865	2,273,252	Position Fix
115	5,692,697	2,273,330	Position Fix
116	5,692,575	2,273,449	Position Fix
117	5,692,432	2,273,575	Position Fix
118	5,692,272	2,273,663	Position Fix
119	5,692,095	2,273,770	Position Fix
120	5,691,939	2,273,858	Position Fix
121	5,691,788	2,273,978	Position Fix
122	5,691,628	2,274,047	Position Fix
123	5,691,462	2,274,149	Position Fix
124	5,691,343	2,274,269	Position Fix
125	5,691,205	2,274,353	Position Fix
126	5,691,052	2,274,454	Position Fix
127	5,690,890	2,274,560	Position Fix
128	5,690,730	2,274,647	Position Fix
129	5,690,576	2,274,739	Position Fix
130	5,690,414	2,274,838	Position Fix
131	5,690,272	2,274,960	Position Fix
132	5,690,106	2,275,047	Position Fix
133	5,689,950	2,275,115	Position Fix
134	5,689,799	2,275,229	Position Fix
135	5,689,658	2,275,321	Position Fix
136	5,689,501	2,275,418	Position Fix
137	5,689,351	2,275,531	Position Fix
138	5,689,201	2,275,631	Position Fix
139	5,689,043	2,275,710	Position Fix
140	5,688,909	2,275,817	Position Fix
141	5,688,765	2,275,926	Position Fix
142	5,688,653	2,276,031	Position Fix
143	5,688,491	2,276,113	Position Fix
144	5,688,300	2,276,214	Position Fix
145	5,688,167	2,276,306	Position Fix
146	5,688,014	2,276,387	Position Fix
147	5,687,895	2,276,500	Position Fix
148	5,687,733	2,276,571	Position Fix
149	5,687,568	2,276,676	Position Fix
150	5,687,382	2,276,820	Position Fix
151	5,687,276	2,276,952	Position Fix
152	5,687,109	2,277,058	Position Fix
153	5,686,954	2,277,170	Position Fix
154	5,686,783	2,277,269	Position Fix
155	5,686,631	2,277,358	Position Fix
156	5,686,491	2,277,467	Position Fix
157	5,686,320	2,277,582	Position Fix
158	5,686,184	2,277,685	Position Fix
159	5,686,046	2,277,792	Position Fix
160	5,685,885	2,277,864	Position Fix
161	5,685,733	2,277,946	Position Fix
162	5,685,565	2,278,031	Position Fix
163	5,685,402	2,278,133	Position Fix
164	5,685,264	2,278,249	Position Fix
165	5,685,249	2,278,283	Cobble Rock
166	5,685,162	2,278,327	Soft Bottom
167	5,685,012	2,278,430	Position Fix
168	5,684,861	2,278,528	Position Fix
169	5,684,672	2,278,628	Position Fix
170	5,684,496	2,278,725	Position Fix
171	5,684,333	2,278,839	Position Fix
172	5,684,191	2,278,946	Position Fix
173	5,684,061	2,279,088	Position Fix
174	5,683,986	2,279,232	Position Fix
175	5,683,926	2,279,390	Position Fix
176	5,683,903	2,279,571	Position Fix
177	5,683,867	2,279,751	Position Fix
178	5,683,866	2,279,935	Position Fix
179	5,683,831	2,280,129	Position Fix
180	5,683,842	2,280,299	Position Fix
181	5,683,791	2,280,538	Position Fix
182	5,683,749	2,280,724	Position Fix
183	5,683,702	2,280,894	Position Fix
184	5,683,614	2,281,042	Position Fix
185	5,683,501	2,281,191	Position Fix
186	5,683,408	2,281,343	Position Fix
187	5,683,356	2,281,504	Position Fix
188	5,683,269	2,281,694	Position Fix
189	5,683,230	2,281,869	Position Fix
190	5,683,169	2,282,029	Position Fix
191	5,683,108	2,282,186	Position Fix
192	5,683,001	2,282,419	Position Fix
193	5,682,937	2,282,589	Position Fix
194	5,682,871	2,282,771	Position Fix
195	5,682,808	2,282,911	Position Fix
196	5,682,710	2,283,088	Position Fix
197	5,682,611	2,283,287	Position Fix
198	5,682,532	2,283,468	Position Fix
199	5,682,444	2,283,645	Position Fix
200	5,682,320	2,283,866	Position Fix
201	5,682,200	2,284,049	Position Fix
202	5,682,058	2,284,269	Position Fix
203	5,681,962	2,284,475	Position Fix
204	5,681,873	2,284,620	Position Fix
205	5,681,791	2,284,801	Position Fix
206	5,681,726	2,284,983	Position Fix
207	5,681,659	2,285,137	Position Fix
208	5,681,579	2,285,294	Position Fix
209	5,681,469	2,285,464	Position Fix
210	5,681,354	2,285,656	Position Fix

Fix No.	Easting	Northing	Description
211	5,681,287	2,285,843	Position Fix
212	5,681,226	2,286,020	Position Fix
213	5,681,128	2,286,188	Position Fix
214	5,681,059	2,286,366	Position Fix
215	5,680,998	2,286,581	Position Fix
216	5,680,919	2,286,745	Position Fix
217	5,680,799	2,286,915	Position Fix
218	5,680,695	2,287,101	Position Fix
219	5,680,593	2,287,262	Position Fix
220	5,680,498	2,287,437	Position Fix
221	5,680,414	2,287,602	Position Fix
222	5,680,364	2,287,788	Position Fix
223	5,680,335	2,287,974	Position Fix
224	5,680,148	2,288,155	Position Fix
225	5,680,044	2,288,309	Position Fix
226	5,679,915	2,288,468	Position Fix
227	5,679,822	2,288,627	Position Fix
228	5,679,734	2,288,805	Position Fix
229	5,679,701	2,288,894	Position Fix
230	5,679,641	2,289,200	Position Fix
231	5,679,608	2,289,404	Position Fix
232	5,679,561	2,289,570	Position Fix
233	5,679,542	2,289,766	Position Fix
234	5,679,526	2,289,968	Position Fix
235	5,679,479	2,290,146	Position Fix
236	5,679,468	2,290,382	Position Fix
237	5,679,440	2,290,586	Position Fix
238	5,679,381	2,290,763	Position Fix
239	5,679,339	2,290,962	Position Fix
240	5,679,322	2,291,153	Position Fix
241	5,679,314	2,291,330	Position Fix
242	5,679,278	2,291,506	Position Fix
243	5,679,211	2,291,686	Position Fix
244	5,679,166	2,291,885	Position Fix
245	5,679,145	2,292,074	Position Fix
246	5,679,111	2,292,276	Position Fix
247	5,679,078	2,292,469	Position Fix
248	5,679,050	2,292,649	Position Fix
249	5,678,991	2,292,840	Position Fix
250	5,678,878	2,293,014	Rock Outcropping
251	5,678,676	2,293,112	Position Fix
252	5,678,445	2,293,120	